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Mesostigmatic mites (Acarina) from small mammals in the Čergov Mountains (Western Carpathians, Czechoslovakia)*

By

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The paper is dedicated to the memory of Tibor WEISZ (1914—1983).

ABSTRACT. A total of 368 specimens of small mammals (insectivores and rodents) of 11 species were examined for ectoparasites between 1980-1982 which resulted in 1 657 specimens of mites belonging to 22 species. The most numerous species were Laelaps clethrionomydis (51.1%), Haemogamasus nidi (16.4%), Laelaps hilaris (11.2%), Laelaps agilis (10.8%), Eulaelaps stabularis (2.8%), Hyperlaelaps microti (2.3%).

There are no literature data available on the mites infesting small mammals in the region of the Čergov Mts. MRCIAK (1963) published reports from the surrounding areas Ondavské vrchy and KRAMÁROVÁ (1973) from Spišská Magura. In the present paper a report on the mite fauna of small mammals in the Čergov Mts is given.

MATERIAL AND METHOD

Altogether 368 small mammals (insectivores, rodents) captured by snap traps were examined from the following three localities and dates in the Čergov Mts: 1) Hertník 26-28 August, 1980; 2) Lenartov 10-12 November, 1981; 3) Livov 20-23 April, 1982. A description of the investigated area is given by MÉSZÁROS & ŠTOLLMANN, 1984.

The mites were collected by the usual sampling method from the dead host animals or by the washing method. Mites were recorded from the following 9 host species: Sorex araneus Linnaeus (15 specimens infested), S. minutus Linnaeus (2), S. alpinus Schinz (2), Neomys anomalus Cabrera (1), Apodemus agrarius (Pallas) (4), A. flavicollis (Melchior) (12), Clethrionomys glareolus (Schreber) (112), Pitymys subterraneus (de Sélys-Longchamps) (32), Microtus arvalis (Pallas) (7). A total of 1 657 specimens of mites were prepared in Swan's medium and 22 species have been identified. The material of this study is deposited in the Research Station of the Institute of Experimental Biology and Ecology, Slovak Academy of Sciences, Staré Hory.

RESULTS

Mesostigmatic mites of 22 species were found on 9 species of insectivores and rodents. The prevailing part of the material (96%) were collected from 4 host species (A. flavicollis,

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Table 1 Distribution of mite species among infested host species

	Number of examined hosts	Number of infested hosts	P. crassipes	P. brevicornis	E. lunulatus	E. kraepelini	Eugamasus sp.	E. emarginatus	C. mucronatus	C. minor	M. montanus	L. jettmari	L. agilis	L. clethrionomydis	L. hilaris	H. microti	M. ingricus	E. stabularis	H. horridus	H. nidi	H. hirsutosimilis	H. hirsutus	H. isabellinus	H. soricis	Total
S. araneus	46	15	-	1	3	-	-	-	2	-	1	-	-	11	-	-	2	1	-	-	-	1	1	1	24
S. minutus	7	2	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	7	7	16
S. alpinus	7	2	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	2
N. anomalus	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
A. agrarius	9	4	1	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	2	-	-	-	-	6
A. flavicollis	25	12	2	-	1	-	-	-	-	-	1	-	142	2	-	-	-	-	1	-	-	-	-	-	149
C. glareolus	209	112	4	-	8	6	2	-	6	-	2	-	38	820	47	6	-	21	1	157	2	-	2	-	1122
P. subterraneus	57	32	-	1	1	6	-	1	3	1	-	1	-	10	7	-	-	23	-	107	3	-	5	-	169
M. arvalis	7	7	-	-	-	-	-	-	-	-	-	-	-	2	131	31	-	-	-	4	-	-	-	-	168
Total	368	187	7	2	13	13	2	1	11	1	4	2	180	847	186	37	2	46	2	272	5	1	15	8	1657

C. glareolus, P. subterraneus, M. arvalis). The most numerous mite species were found on a wide host spectrum, e.g. Laelaps clethrionomydis on 7, Haemogamasus nidi on 6, Laelaps hilaris and Eulaelaps stabularis on 4 host species, respectively. The distribution of the mites on the host species is given in Table 1.

SYSTEMATIC ACCOUNT

In the following section a list of species is given, together with collection data, host species and number of mites collected from that host.

PARASITIDAE

Pergamasus crassipes Linnaeus, 1758
Hertník 26-28 Aug., 1980 - A. agrarius 1, A. flavicollis 2, C. glareolus 3; Lenartov 20-23 April, 1982 - C. glareolus 1.

Pergamasus brevicornis Berlese, 1903
Lenartov 10-12 Nov., 1981, 20-23 April, 1982 - S. araneus 1, P. subterraneus 1.

Eugamasus lunulatus (Müller, 1859)
Hertník 26-28 Aug., 1980 - S. araneus 3, A. flavicollis 1, C. glareolus 8; Livov 20-23 April, 1982 - P. subterraneus 1.

Eugamasus kraepelini Berlese, 1906
Hertník 26-28 Aug., 1980 - A. agrarius 1, C. glareolus 5, P. subterraneus 2; Lenartov 10-12 Nov., 1981 - C. glareolus 1; Lenartov 20-23 April, 1982 - P. subterraneus 1; Livov 20-23 April, 1982 - P. subterraneus 3.

Eugamasus sp.
Hertník 26-28 Aug., 1980 - C. glareolus 2.

RHODACARIDAE

Euryparasitus emarginatus (C.L. Koch, 1839)
Livov 20-23 April, 1982 - C. glareolus 1, P. subterraneus 1.

Cyrtolaelaps mucronatus (C. & R. Canestrini, 1881)
Hertník 26-28 Aug., 1980 - C. glareolus 2; Lenartov 10-12 Nov., 1981 - S. araneus 2, C. glareolus 3; Lenartov 20-23 April, 1982 - P. subterraneus 1; Livov 20-23 April, 1982 - C. glareolus 1, P. subterraneus 2.

Cyrtolaelaps minor Willmann, 1952
Lenartov 20-23 April, 1982 - P. subterraneus 1.

MACROCHELIDAE

Macrocheles montanus (Willmann, 1951)
Hertník 26-28 Aug., 1980 - S. araneus 1, A. flavicollis 1, C. glareolus 2.

DERMANYSSIDAE

Laelaps jettmari Vitzthum, 1930
Hertník 26-28 Aug., 1980 - A. agrarius 1, P. subterraneus 1.

Laelaps agilis C.L. Koch, 1836
Hertník 26-28 Aug., 1980 - A. flavicollis 35, C. glareolus 34; Lenartov 10-12 Nov., 1981 - A. flavicollis 107, C. glareolus 4.

Laelaps clethrionomydis Lange, 1955
Hertník 26-28 Aug., 1980 - C. glareolus 15; Lenartov 10-12 Nov., 1981 - S. araneus 10, S. minutus 1, M. arvalis 1, A. flavicollis 2, C. glareolus 212; Lenartov 20-23 April, 1982 - M. arvalis 1, C. glareolus 25, P. subterraneus 4; Livov 20-23 April, 1982 - S. araneus 1, S. alpinus 1, C. glareolus 568, P. subterraneus 6.

Laelaps hilaris C.L.Koch, 1836
Hertník 26-28 Aug., 1980 - S. minutus 1; Lenartov 10-12 Nov., 1981 - M. arvalis 7, C. glareolus 46; Lenartov 20-23 April, 1982 - M. arvalis 118, C. glareolus 1, P. subterraneus 6; Livov 20-23 April, 1982 - M. arvalis 6, P. subterraneus 1.

Hyperlaelaps microti (Zachvatkin, 1948)
Lenartov 10-12 Nov., 1981 - M. arvalis 24, C. glareolus 5; Lenartov 20-23 April, 1982 - M. arvalis 5, C. glareolus 1; Livov 20-23 April, 1982 - M. arvalis 2.

Myonyssus ingricus Bregetova, 1956
Hertník 26-28 Aug., 1980 - S. araneus 1; Lenartov 10-12 Nov., 1981 - S. araneus 1.

Eulaelaps stabularis C.L.Koch, 1836
Hertník 26-28 Aug., 1980 - A. agrarius 1, C. glareolus 10, P. subterraneus 3; Lenartov 10-12 Nov., 1981 - S. araneus 1, C. glareolus 6; Livov 20-23 April, 1982 - C. glareolus 5, P. subterraneus 20.

Haemogamasus horridus Michael, 1892
Hertník 26-28 Aug., 1980 - A. flavicollis 1; Lenartov 10-12 Nov., 1981 - C. glareolus 1.

Haemogamasus nidi Michael, 1892
Hertník 26-28 Aug., 1980 - A. agrarius 2, C. glareolus 7, P. subterraneus 11; Lenartov 10-12 Nov., 1981 - N. anomalus 1, M. arvalis 3, C. glareolus 95, P. subterraneus 2; Lenartov 20-23 April, 1982 - M. arvalis 1, C. glareolus 4, P. subterraneus 9; Livov 20-23 April, 1982 - S. alpinus 1, C. glareolus 51, P. subterraneus 85.

Haemogamasus hirsutosimilis Willmann, 1952
Lenartov, 10-12 Nov., 1981 - C. glareolus 2; Livov 20-23 April, 1982 - P. subterraneus 3.

Haemogamasus hirsutus Berlese, 1889
Hertník 26-28 Aug., 1980 - S. araneus 1.

Hirstionyssus isabellinus (Oudemans, 1913)
Hertník 26-28 Aug., 1980 - S. araneus 1, S. minutus 7, C. glareolus 1, P. subterraneus 5; Lenartov 10-12 Nov., 1981 - C. glareolus 1.

Hirstionyssus soricis (Turk., 1945)
Hertník 26-28 Aug., 1980 - S. araneus 1, S. minutus 7.

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